

IN THE SPECIFICATION

Please amend the paragraph starting at page 6, line 16 as follows:

The piston preferably has a length of 5 mm to 10 cm, preferably from 1 cm to 7.5 cm. The ~~cross~~
~~section-diameter~~ of the piston is preferably 0.25 to 4 mm, more preferably 0.5 to 3 mm and most
preferably 0.75 to 2.25 mm.

Please amend the paragraph starting at page 12, line 3 as follows:

In a piston pump for metering very small volumes a quantity of liquid of about 15 ~~μ~~microliter
has to be conveyed very precisely in a single piston stroke. This must also be the case even
when the device is actuated for the first time after a period of idleness. To ensure this, no air
must enter the pump during the period of idleness as otherwise the metering can longer be
carried out with the desired precision.

Please add the following paragraphs starting on page 12, line 23:

The piston may also be operated by means of a spring 30, e.g. a helical spring, which is
mechanically or electrically biased and connected to the piston via a flange. Details may be
found from the prior art relating to medical devices, particularly the fields of transdermal
therapeutic systems, atomisers, propellant-free inhalers, needleless injectors, etc.

The piston may be operated for example by coupling to a piezoelectric element 32. This
coupling may be direct, via one or more lever arms or a diaphragm. Preferably, the piston is
moved directly by the piezoelectric element 32. The piezoelectric element 32 itself is actuated
by a microchip, for example, in such a case.

Please amend the title by deleting same and replacing the title with the following:

--PISTON PUMPING SYSTEM HAVING O-RING SEAL PROPERTIES--